

The NIH Record

'Approaching a Crisis'

NIH Struggle Continues for Parity in Pay with Private Sector

By Rich McManus

Three weeks ago on Capitol Hill, NIH director Dr. James Wyngaarden gave disheartening testimony before a House committee about NIH's inability to pay scientists enough to keep them or attract them to NIH in the first place.

"NIH has been experiencing severe problems recruiting and retaining senior level personnel of the prominence and stature required to lead and conduct national research programs," he told the House Committee on Post Office and Civil Service, which oversees Federal pay.

Less measured terms were used by Dr. Philip S. Chen Jr., NIH associate director for intramural affairs, in a recent interview:

"We are rapidly approaching a crisis," he

said. "We're way behind. We ought to be able to pay double what we're paying people in the top jobs, and 25 to 50 percent more for lower levels."

Chen, who first came to NIH 33 years ago and to Bldg. 1 in 1968, offered a brief history of NIH attempts to equate government salaries with those available in the private marketplace.

Personnel at NIH is a tale of two cities. On the one hand is the Commissioned Corps, part of PHS, which generally offers research scientists higher pay than the second system on campus, Civil Service. An M.D. planning on a federal research career has always been best advised to join the corps. Indeed many top scientists here, including Wyngaarden and a

number of institute directors, are corpsmen.

"When I came to NIH, the pay differential between a corps physician and a civilian M.D. was not large," Chen said. In the intervening years, a variety of incentive pays and bonuses with a bewildering array of acronyms—VIP, RSP, BCP, MORB—have generally made corps service more attractive than civil service for physicians, most of whom, not surprisingly, are in the corps.

The problem today, however, is that scientists at the top end of each system—SES (Senior Executive Service) members on the Civil Service side and assistant surgeons general on the PHS side (flag-rank officers whose numbers are limited to one percent of total

(See PAY PROBLEM, Page 8)

80th Birthday Celebration

Symposium Honors Stetten as Man And Mentor

The recent celebration of Dr. DeWitt Stetten Jr.'s 80th birthday featured two qualities that have seemed to follow him throughout 35 years of association with NIH—deep affection and deep devotion to knowledge.

A symposium on the molecular basis of disease, held in his honor in Masur Auditorium, attracted some of the finest investigators in American medicine today. "It was an intellectual feast," remarked a science writer in attendance.

Before the speakers gave their talks, however, they paused to pay tribute to a mentor whose influence on this institution is probably unparalleled.

"I owe a very great personal debt to Hans Stetten," said NIH director Dr. James B. Wyngaarden, who first became aware of Stetten (whose friends call him Hans) during a residency at Peter Bent Brigham Hospital in Boston. "We shared an interest in metabolic disease. He offered a seminal research experience early in my career and much good advice during the 7 years that I have been director."

Wyngaarden recalled early influences on Stetten's life, recounting that the current NIH deputy director for science emeritus was already teaching biochemistry at Columbia University in 1938, before he had obtained his Ph.D. in that subject. In 1951, Dr. James A.

(See STETTEN, Page 6)

Almost Six Million Affected

Depression Drugs May Offer Hope In Obsessive Compulsive Disorder

By Carla Garnett

A little boy who collects rocks and a teenage girl who spends hours in the bathroom seem like prime examples of two different stages in adolescence. But when the boy insists on keeping every rock he steps over or when the teenager feels that a shower every other hour is essential, the two youngsters may become prime examples of a distressing medical problem—obsessive compulsive disorder (OCD).

"Obsessive Compulsive Behaviors: New Perspectives," a clinical staff conference held

recently at the Clinical Center, reviewed a disorder that affects almost six million people in the United States.

Dr. Judith Rapoport, chief of the Child Psychiatry Branch (CPB) at NIMH and conference moderator, defined the disorder:

"OCD is characterized by often bizarre, irrational, unwanted, repetitive behaviors or thoughts by people who otherwise seem so rational."

OCD patients frequently find themselves

(See DISORDER, Page 4)



Guest speaker Dr. Thomas Gelebrter of the University of Michigan offers Dr. DeWitt Stetten Jr. his congratulations on the occasion of Stetten's 80th birthday, which was marked by a symposium and luncheon.

What To Do When Coworker Has AIDS

A program entitled "What To Do When a Coworker Has AIDS," will be offered at 10 a.m. on Friday, June 2 in Masur Auditorium, Bldg. 10.

It will begin with the film "One of Our Own," which shows a company faced with the dilemma of an employee with AIDS and how it developed a strategy for handling AIDS in the workplace.

Following the film, a panel of people living and working with AIDS will share personal experiences and answer questions from the audience.

Keynote speaker at noon will be Dr. Reed V. Tuckson, commissioner of public health in the District of Columbia, winner of a 1988 "Washingtonian of the Year" award and an engaging lecturer.

A repeat of the morning's panel discussion and film, in that order, commences at 1 p.m.

"I encourage supervisors to allow interested employees to attend this important program," said NIH director Dr. James Wyngaarden.

The program sponsors have arranged for additional shuttle buses from the Westwood Bldg. and Executive Plaza for the June 2 program. Buses will meet employees at the designated shuttle bus pick-up points. The schedule listed below is in addition to the regular shuttle bus schedule:

Time	From	To
9:30 a.m.	Westwood Bldg. Executive Plaza	Bldg. 10, ACRF
11:30 a.m.	Westwood Bldg. Executive Plaza	Bldg. 10, ACRF
12 noon	Bldg. 10, ACRF	Westwood Bldg. Executive Plaza
12:30 p.m.	Westwood Bldg. Executive Plaza	Bldg. 10, ACRF
1 p.m.	Bldg. 10, ACRF	Westwood Bldg. Executive Plaza

The program is sponsored by the Employee Counseling Services, OMS, and the Clinical Center's educational services office, which can give further details (496-1618).

Protesters Arrested on Campus

Two animal rights groups, In Defense of Animals and People for the Ethical Treatment of Animals, recently protested the use of animals in medical research at NIH, marking World Lab Animal Liberation Week.

Approximately 200 representatives from the two groups marched along Rockville Pike and Center Drive near the Medical Center Metro stop, stringing banners and carrying placards. Members then linked hands forming a human chain that blocked traffic on the pike for about three miles in each direction until Montgomery County police officers forcibly removed them.

Some more violent activists gathered in front of Bldg. 1, pounding its doors with fists and sharp objects and causing more than \$700 damage to the edifice. A few protesters physically attacked police officers.

NIH police arrested 21 people, all for trespassing and some for resisting arrest and assaulting police officers. "They were a little nastier this time," admitted NIH security chief Jim Sweat.

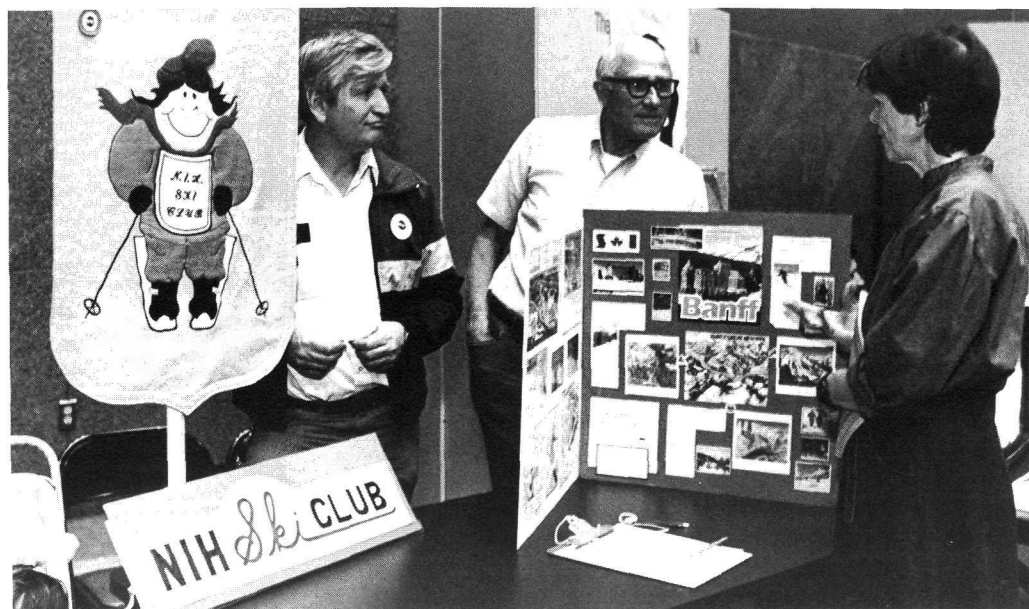
Montgomery County police handed traffic citations to 38 protesters for failing to obey police officers and for blocking traffic along Rockville Pike. Citations can carry a maximum \$255 fine. □

To All NIH Blood Donors

The NIH Department of Transfusion Medicine will hold its annual Donor Appreciation Day on Thursday, May 25, at 11 a.m. in Masur Auditorium, Bldg. 10. Festivities will immediately follow in the exhibit hall of the Visitor Information Center. Please call 496-1048 to RSVP as soon as possible. □

Arboreal ID Planned

Ever wondered if it's an ash, an elm or an oak? A project planned by the Eistophos Science Club will be under way soon to identify and mark about 30 of the more uncommon trees along NIH's major walkways. The Bethesda-based club will choose from the approximately 7,000 trees that grow along the 14 miles of sidewalk and 193 acres of turf that constitute NIH's 318-acre main campus. □



The R&W recently sponsored a Club Information Day. Of the 24 clubs that participated, some did demonstrations and others used VCR's and pictures to make their booths informative and fun for observers. Thanks to the participation and enthusiasm of club representatives, the event was very successful.

The NIH Record

Published biweekly at Bethesda, Md., by the Editorial Operations Branch, Division of Public Information, for the information of employees of the National Institutes of Health, Department of Health and Human Services, and circulated to nonemployees by subscription only through the Government Printing Office. The content is reprintable without permission. Pictures may be available on request. Use of funds for printing this periodical has been approved by the director of the Office of Management and Budget through September 30, 1989.

NIH Record Office
Bldg. 31, Room 2B-03
Phone 496-2125

Editor
Richard McManus

Staff Writers
Anne Barber
Carla Garnett

Editorial Assistant
Marilyn Berman

Staff Correspondents:
CC, Ellyn Pollack
DCRT, Christine Pennella
DRG, Sue Meadows
DRR, Michael Fluharty
DRS, Jim Doherty
FIC, Elizabeth Gillette
NCI, Patricia A. Newman
NEI, Claudia Feldman
NHLBI, Blair Gately
NIA, Margo Warren
NIAID, James Hadley
NIAMS, Barbara Weldon
NIDDK, Eileen Corrigan
NICHD, Carol Florance
NIDR, Mary Daum
NIEHS, Hugh J. Lee
NIGMS, Wanda Warddell
NCNR, Gerry Pollen
NINDS, Carol Rowan
NLM, Roger L. Gilkeson

The NIH Record reserves the right to make corrections, changes, or deletions in submitted copy in conformity with the policies of the paper and HHS.

NHLBI Modifies Clinical Trial; Use of Two Drugs Limited

By Blair Gately

Two drugs used widely to treat heart arrhythmias (irregular heartbeats) have been withdrawn from most uses after a National Heart, Lung, and Blood Institute clinical trial found they increased the risk of death in patients in a clinical trial.

At a recent press conference here, NHLBI officials and trial investigators said the study showed that patients on the two medications—encainide and flecainide—were dying more than twice as fast as patients who were taking placebos.

As a result, the Food and Drug Administration said it was immediately advising physicians to use the drugs only for patients with life-threatening arrhythmias. The manufacturers of the two drugs sent "Dear Doctor" letters, developed in consultation with FDA, to physicians advising them that the two drugs should be used only in those cases.

"Sometimes a clinical trial will not demonstrate benefits for a drug or a therapy approach," Dr. Claude Lenfant, director of NHLBI, said at the press conference. "When this happens, the results may be just as important, or even more important than findings suggesting benefits."

The Cardiac Arrhythmia Suppression Trial (CAST) involved the two drugs now available on prescription—encainide and flecainide—and a third drug—moricizine—that is not on the market. The trial is continuing with moricizine.

The 27-center CAST trial was designed to measure the effectiveness of the three drugs to control arrhythmias in patients who had had a heart attack. Such heartbeat irregularities are a common complication of heart attacks and they may increase the likelihood of death, especially death due to sudden cardiac arrest.

Half of the patients in the trial received one of the three drugs; the other half received a placebo. Among the 730 patients assigned to encainide or flecainide and treated an average of about 10 months, 56 had died or suffered cardiac arrest, while among the 725 assigned to corresponding placebos, 22 had died or had cardiac arrest.

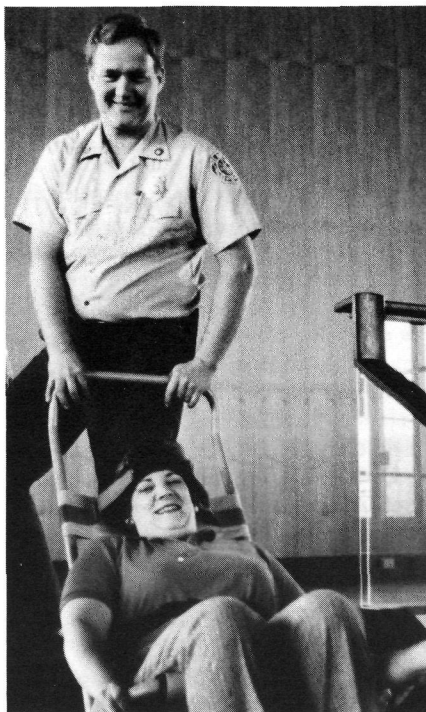
Dr. J. Thomas Bigger, chairman of the CAST steering committee and professor of medicine and pharmacology at Columbia University College of Physicians and Surgeons, told reporters he was "truly stunned and shocked" by the trial results. He said, however, that the two drugs should still be used to treat patients with life-threatening arrhythmias because the benefits in those cases outweighed the risks.

NHLBI officials and FDA chief Dr. Frank Young emphasized repeatedly that although the use of the drugs is being restricted, patients should check with their doctors before changing their medication.

Encainide and flecainide both belong to a class of pharmaceuticals that work to slow electrical conduction in the heart. Encainide (Enkaid) is manufactured by Bristol-Myers. Flecainide (Tambocor) is made by 3M Riker Laboratories.

The Data and Safety Monitoring Board, which reviewed the data from the CAST study, recommended on Apr. 17, after examining interim data on about 1,500 patients, that the use of encainide and flecainide be discontinued. CAST investigators were notified on Apr. 18 and 19.

Dr. Lawrence Friedman, NHLBI associate director for clinical applications and prevention, said analysis of data from the CAST is continuing and an article on the findings is being prepared for a medical journal. □



NIH firefighter Dale Boswell of the Emergency Management Branch (EMB) helps a volunteer descend a staircase during a mock evacuation exercise held recently at the Lister Hill Center. The lightweight Evac-chair was specially designed to move disabled employees or patients down steps easily and safely in the event of fire or other disaster. EMB's fire and emergency response section is evaluating the usefulness of the chair; its verdict will be made available to the NIH handicapped committee and other interested individuals.

NHLBI Sponsors Tissue Transplantation Symposium

The National Heart, Lung, and Blood Institute and the Cystic Fibrosis Foundation will jointly sponsor a Frontiers in Basic Sciences Symposium on the biology of tissue transplantation June 8-9.

The meeting will be held in Masur Auditorium at the Clinical Center from 8:30 a.m. to 5 p.m. on Thursday and 8:15 a.m. to 4 p.m. on Friday.

Leading researchers and experts in the field will present their views on the state of the science, the problems facing current understanding and anticipated future developments in the biology of tissue transplantation.

Cochairmen of the symposium are Dr. David Sachs of NCI and Dr. Samuel Strober of Stanford University Medical Center.

The meeting will be divided into five sessions, each of which will be followed by a chairman's summary and discussion.

The meeting is the 12th in the series "Frontiers in Basic Sciences that Relate to Heart, Lung, and Blood Diseases." The series is designed to transfer the progress achieved in basic science disciplines to clinical research problems.

NIH staffers are welcome to attend the symposium sessions at no cost, without participating in meal and break functions. However, all those who plan to attend should preregister.

For more information, contact Gerri Wolfe, NHLBI, 496-9899. □

Cystic Fibrosis Symposium

This year the fourth annual Spring Cystic Fibrosis Symposium will be held on the following days: Part I "Secretion and Ion Channels" May 25, (8 a.m.-noon); Part II "Genetics and Development" June 1 (8 a.m.-noon).

The symposium will be held in Lipsett Amphitheater, Bldg. 10. For further information, call Dee Tyler, 496-3435. □

ECS Presents Film

The NIH Employee Counseling Services will present a film entitled "Family Matters," about how families learn to deal with the family member who has an addiction to drugs, alcohol, or food, on Thursday, June 1, from noon to 1 p.m., in the Little Theatre, Clinical Center.

This concludes the Guest Lecture/Film Series presented by ECS. □

DISORDER

(Continued from Page 1)

repeating to excess odd habits or behaviors, many of which involve personal grooming, for no apparent reason.

"When we started this research 15 years ago," Rapoport marveled, "who would have thought it would be this close to becoming the psychiatric disorder of the eighties."

Although OCD was recognized by medical researchers as early as the 19th century, the disorder has only recently demanded the attention of so many scientists. According to Rapoport, the reason for OCD's increased popularity is at least twofold.

"At least three new drugs, all previously used to treat depression, are now proving helpful with OCD patients," she claimed. "And too, the increased prevalence of obsessive compulsive disorder, or increased recognition of prevalence, have led more (researchers) to study it."

The symptoms of OCD can be divided into two distinct categories—obsessions, the recurrent thoughts and ideas, and compulsions, the accompanying repetitive behavior. A patient obsessed with ideas of cleanliness or orderliness, for instance, may compulsively take six showers and wash and sort 10 loads of laundry daily.

Many other disorders with seemingly similar characteristics historically have been associated with OCD including eating disorders, agoraphobia, homicidal mania, panic disorders, general anxiety, epilepsy and hypochondria. At present, none of these is grouped with obsessive compulsive disorder.

What are the core deficits in OCD? According to Rapoport, the underlying problems are volitional, emotional and intellectual.

"All three are clearly present in acute attacks," Rapoport observed.

Common compulsions include washing, arranging, checking, counting, repeating and hoarding. One-third to one-half of OCD cases begin in childhood.

"It can start at a very early age," reported Dr. Henrietta Leonard, a senior staff fellow in CPB. "So far the earliest age (of onset) we've seen is a 2-year-old."

Boys are more likely to experience onset of OCD in prepubescent ages whereas it is more likely to occur in girls during puberty.

OCD may also have familial ties. According to Leonard, 17 percent of parents who had obsessive compulsive children in the NIMH study also met the criteria for OCD diagnoses themselves.

Scientists investigating pharmacologic treatments of OCD are experimenting with a variety of drugs previously used to help

depression patients.

In an NIMH crossover study described by Leonard, the drugs clomipramine (CMI) and desipramine (DMI), two antidepressants, were given separately to two groups of OCD patients, after a brief initial placebo phase.

"Clomipramine was significantly more effective in treating the OCD symptoms," reported Leonard. "Patients initially taking CMI relapsed after switching to DMI."

The study also found that OCD is independent of depression as shown by the superiority of clomipramine to other anti-depression drugs.

Although first results of the study offer OCD patients hope through CMI therapy, Leonard hastened to ask questions still unanswered by researchers.

What happens to study patients who have had the opportunity of psychopharmacologic

"When we started this research 15 years ago, who would have thought (obsessive compulsive disorder) would be this close to becoming the psychiatric disorder of the eighties."

—Dr. Judith Rapoport
NIMH

and behavioral treatment? How are they functioning later in life?

"According to preliminary followup," noted Leonard, "many patients are doing very poorly."

It is clear that clomipramine has some important tests to pass. Researchers want to determine the role of long-term CMI therapy. Is it necessary to maintain clinical response? When do the effects of the treatment wear off?

Dr. Dennis Murphy, chief of NIMH's Laboratory of Clinical Science, discussed serotonin subsystems and OCD. He agreed with Leonard's conclusion about CMI therapy.

Murphy also reported findings of another study that combined CMI and lithium, which is used to treat depression and manias.

"Lithium and CMI can increase the number of patients who benefit from CMI (only)," he said. "We think this disorder (OCD) is far more complex than originally thought."

Relating the similarities between OCD and two other rare compulsive disorders, Dr. Susan Swedo, CPB senior staff fellow, talked about trichotillomania (hair pulling) and onychophagia (nail biting), which affect mainly women.

Patients with trichotillomania go far beyond the common nervous habit of pulling on hair before a big test or idly picking at hairs while

on the telephone. These patients pluck large amounts of hair from the scalp and other areas, sometimes leaving only a thin peripheral hairline.

"Again we go back to grooming," Swedo said, noting that most of these patients think they are simply correcting a bad haircut or balancing asymmetrical eyebrows or lashes.

Onychophagia patients, too, seem obsessed with grooming, biting their nails, and sometimes cuticles, down close to the roots.

Swedo discussed hypotheses that related ethology to OCD and compulsive hair pulling and nailbiting. Ethology examines the natural behaviors of animals.

"OCD may be an inappropriately released fixed action pattern," she said, defining normal fixed action patterns (FAP) as things done routinely, almost without real thought. Morn-ing daily rituals like teeth brushing and face washing are examples of FAP's.

Swedo asserts: "OCD may be a fixed action pattern that has no purpose."

Other diseases have been associated with OCD in brain imaging studies.

Dr. Mark Schapiro of NIA's Laboratory of Neurosciences reported on a study conducted by CPB that found increased incidence of obsessive compulsive symptomatology in Sydenham's chorea, a disorder that affects motor functions and is characterized by involuntary, jerky movements and abnormal gait.

In slides of PET scans, which allow measurement of brain metabolism, irregular brain metabolism levels were observed in OCD patients.

Schapiro commented: "There is clearly increased metabolism in OCD patients in four brain regions."

Summarizing the conference moderator Rapoport cited the controversial application of ethology to human behavior.

"It is provocative to think of fixed action patterns," she said, "but we have to be very careful not to misuse ethology."

Sharing results from a study on acral lick dermatitis, a disorder in which animals lick their lower extremities to baldness and ulceration, Rapoport said:

"This is a rather compelling animal model, though by no means the only one. It's interesting because like hair pulling and nail biting, it (excessive licking by animals) may be an example of grooming behavior run wild. And like humans, the animals given clomipramine seem to improve." □

*The Germs They Are A-Changin'***Clue Found To How Lyme Disease Establishes Persistent Infection**

Researchers at NIAID have found a clue to why Lyme disease—an increasingly common illness transmitted by pinhead-sized ticks—can be a difficult infection to arrest. The tiny spiral-shaped bacterium, or spirochete, that causes the disease gradually transforms its appearance and thus may outwit the immune system.

This finding could explain why some people experience relapses of symptoms and has important implications for scientists trying to develop Lyme disease vaccines. The less stable the structure of an organism, the more difficult it is to design a vaccine.

Dr. Tom G. Schwan presented this research at the 89th annual meeting of the American Society for Microbiology held recently in New Orleans. Schwan and his coauthors—Dr. Warren J. Simpson, Merry E. Schumpf, and Robert H. Karstens—work at Rocky Mountain Laboratories in Hamilton, Mont., part of NIAID.

The Lyme disease spirochete, like other infectious organisms, has unique molecular markers, called antigens, that identify it like a fingerprint. Upon first encountering the spirochete, the immune system makes clones of cells with complementary-shaped markers called antibodies. These custom-made antibodies can lock onto the spirochetes' antigens and initiate the process that destroys the bacterium.

However, antigens of the Lyme disease spirochete, the researchers have found, change over time. As the spirochete's disguise evolves,

the antibodies originally made to fight the organism no longer "fit" its antigens. By continually evolving, the spirochete can keep one step ahead of the immune system, even though in time new antibodies are made.

Researchers had previously observed change in the antigens of Lyme disease spirochetes cultured in the laboratory. The NIAID researchers decided to see whether such changes also occurred in Lyme disease spirochetes when grown in their natural animal hosts. Schwan and his coworkers chose the white-footed mouse, a primary carrier of the spirochete and spirochete-bearing ticks, to begin their investigation.

Ten mice were inoculated with infectious Lyme disease spirochetes, known as *Borrelia burgdorferi*. For the next 12 to 16 weeks the researchers periodically drew blood from these animals. Analysis of the samples showed high levels of three important antibodies directed against *B. burgdorferi*. The mice thus appeared to be mounting an adequate defense against the infection.

The researchers next examined whether, as might be expected, the antibodies had in fact halted the infection's spread. Because spirochetes are difficult to isolate from the blood, the researchers looked for evidence of the infection in the animals' spleens and bladders. Paradoxically, they found that *B. burgdorferi* continued to thrive despite seemingly adequate levels of antibodies.

This apparent contradiction could be

explained by a change in the spirochete's antigens, but such a theory needed confirmation. So, first, Schwan's group examined how antibodies in the blood samples bound to the spirochetes in the original inoculate. Then they compared this binding pattern with that created by the antibodies bound to spirochetes retrieved from the mice at the end of the experiment. Fewer antibodies bound to the latter sample of spirochetes, indicating that antigenic change must have taken place.

The basis of the change hasn't been determined, but genes encoding antigens of the spirochete could spontaneously relocate, or environmental factors in the spirochetes' milieu could affect when or which genes are turned on and off. Other microorganisms, such as the spirochete that causes relapsing fever and the protozoan that causes African sleeping sickness, are known to establish persistent infections by antigenic change.

About 5,000 new cases of Lyme disease are reported in the United States each year. Initial signs of infection may include flu-like symptoms and a rash, but some people do not develop symptoms or if they do, do not recognize them as signs of Lyme disease. Without prompt antibiotic treatment, arthritic, neurologic and cardiac symptoms can develop months or years later, sometimes evolving into chronic problems. The antigenic change could explain why people with silent *B. burgdorferi* infections sometimes have symptoms flare up out of the blue.—Laurie K. Doepel □

Does American Employment Policy Measure Up?

The faces in the mainstream of America's workforce have been changing recently as more women and mothers join the ranks. With that new look come new problems concerning leave policies for both men and women. How does America's family leave policy compare with the practice in such European countries as West Germany, the United Kingdom and Sweden? These and other issues will be addressed May 22 when Susanne Stoiber, acting deputy director of NIH's Division of Equal Opportunity, speaks on "Parental Leave and Woman's Place," in Wilson Hall from noon to 1 p.m.

Stoiber, former executive officer of the Clinical Center, is the author of a recent publication about the impact of three European approaches to family leave policy.

According to the report, employment policies in the United States have not adapted to the new configuration of our workforce. More than 70 percent of American women between the ages of 20 and 50 work outside the home.

This includes not only those expected to work such as single women, married women without children and married women with older children, but also a large proportion of mothers with preschool children.

The pattern that once saw married women with children working less than 40 hours a week is changing. The trend is clearly toward a steady increase in full-time work. This will lead to new problems because, as Stoiber points out, the average working woman no longer has a backup at home to handle routine domestic responsibilities and family crises.

Pressure on lawmakers from constituents and special interest organizations has fostered a new movement to enact legislation better defining employees' and employers' rights regarding certain leave policies. Employees argue that work environments enabling parents to attend to reasonable needs of their families constitute a sound, long-term investment in social stability and increased productivity. Employers fear legislated changes

will increase total payroll costs. Adds Stoiber, the interest in legislation to tie employee rights to personal leave comes at a time of intense national concern over the productivity of American business and the country's ability to compete in foreign markets.

How do workers with the same concerns fare in foreign countries? Stoiber reports that families in Europe, where the female labor force is large, face similar difficulties. A major difference, however, is that European governments have developed policies intended to make integration of these two spheres of life less stressful. Although policies vary widely by country and region, all effectively give working people more discretionary time than is normally available to American workers.

Sign language interpretation at the lecture and reserved seating will be provided for the deaf. For more information, contact Bonnie Douglas, 496-2847.—Harriett V. Bennett □

STETTEN

(Continued from Page 1)

Shannon, who would later become a prominent NIH director, recruited Wyngaarden to the Public Health Service and to laboratory space in a rapidly filling and newly opened Clinical Center.

"He strongly recommended Hans' laboratory," Wyngaarden recalled.

Most impressive to Wyngaarden were Stetten's "habits of discipline and of mind. He remains extraordinarily current, more so than many of us."

Suffering from a progressive eye disease, Stetten began going blind in the late 1970's. Nevertheless he continued to learn, study and write, using any means available to him.

Wyngaarden recollected an evening when Stetten gave a 25-minute lecture strictly from memory, deviating from a previously written text only briefly.

"His wife was following along, line by line, in a written text," he remembered. "Only once did he stumble, but then quickly recovered and gave the rest of the speech without a pause."

Dr. Elizabeth Neufeld, the first speaker on the program and a professor at UCLA, remembered a 1962 letter from Stetten inviting her to consider a research career at NIH.

"He wrote that my sole responsibility was to do the best work of which I was capable," she said. "That is great advice to give to a young scientist."

Neufeld went on to a distinguished 21-year career at NIH, during which she specialized in the study of lysosomal storage disorders, including Tay-Sachs disease.

"[Stetten] wrote that my sole responsibility was to do the best work of which I was capable. That's great advice to give to a young scientist."

—Elizabeth Neufeld, UCLA

Dr. Theodore Friedmann, a prominent geneticist at the University of California, San Diego, credited Stetten and former NIH Nobel laureate Christian Anfinsen with furthering his research career while he was a young investigator at NIH.

"Stetten created a climate that encouraged thinking big thoughts," he said, "the kind that stir men's hearts."

Obviously having profited by the association, Friedmann described his laboratory's work using viral vectors to treat genetic dis-



Among the well-wishers at a symposium and luncheon honoring Dr. DeWitt Stetten Jr. (l) was Dr. William H. Goldwater, who studied biochemistry under Stetten at Columbia University following World War II. Coinciding with his 80th birthday, the event included many tributes to Stetten as both man and mentor.

ease. Applications include cancer, heart disease and disorders of the central nervous system.

The next speaker never worked in Stetten's lab, but described himself as a "scientific grandson" since his mentor was a Stetten protege—Dr. Gordon Tomkins.

"Dr. Stetten had a major impact on my career in two ways," said Dr. Thomas Gelehrter of the University of Michigan. "The first was a biochemistry textbook that Stetten coauthored. It was very memorable." The second, inherited through Tomkins, was a "love of science and high standards of quality. I hope to pass these qualities on to my students and to the next generation," he said, adding that he is writing his own textbook at the moment.

Dr. Philip Leder of Harvard University, whose lecture on cancer studies using transgenic mice drew an influx of young investigators to the hall, said, "There is no possible, imaginable way that I would miss an opportunity to honor Hans Stetten. He is an enormously important figure in biomedical sciences and in medicine."

Dr. J. Edwin Seegmiller of UCSD said he and Wyngaarden had shared Stetten as a mentor, honored widely for his integrity and wisdom. "What many people don't know, however, is that Hans is a magician. He trained as one when he was young and has entertained my four children. But Hans is a magician in many other ways, in the remarkable enthusiasm he has demonstrated in showing people their potential.

"We tend to limit the things we think we can do," he said. "Hans' legacy is that he has widened our view of what might be possible."

Several NIH scientists in attendance commented on Stetten's influence on their careers:

"When I was up at Harvard, he was the most highly regarded proponent, and example, of the physician-scientist that you could imagine," said Dr. Michael Gottesman, an NCI investigator. "He believed that you could train physicians as scientists and that biomedical research would advance much faster as a result."

Dr. William H. Goldwater, who is currently extramural programs management officer in the Office of Extramural Research, OD, was Stetten's second graduate student in biochemistry at Columbia in 1945.

"The symposium was a very emotional event for me," he said. "It's been more than 40 years since I got my degree, but I've always had reason to reflect back on the teachings that Hans gave. He always emphasized honesty, integrity and quality, not quantity."

Goldwater said the hallmarks of Stetten's teaching life were the "breadth and depth of knowledge and insights he had, and the way he so effectively imparted them. He was very popular with both the biochemistry graduate students and with medical students."

At a post-symposium luncheon held at the Cloister and attended by many top NIH staff and alumni, Hans Stetten had the last word:

"Quality is the only thing worth striving for in our business," he said, adjuring friends and colleagues to take courage and not "give up the ship. Now is a gloomy time in NIH history. We've had them before and we'll have them again," he counseled. "Perhaps we'll have a party in another 100 years. God bless you. I love you." His friends and colleagues responded with a standing ovation.

—Rich McManus



Stetten and his family, including his wife Jane (seated portrait).

Roth Elucidates Stetten's Influential Pathways

Dr. Jesse Roth, NIDDK scientific director, offered the following NIH genealogy based on the influence of Dr. DeWitt Stetten Jr. on him and on NIH.

"My links to Stetten were multiple. I started medical school at Einstein where the professor of biochemistry was Dr. Abraham White, with whom I was quite close. Dr. White was a close friend of Stetten and they were coauthors of a major textbook of biochemistry. In fact, our class used the first edition of what became a classic textbook in the field, *Principles of Biochemistry* by White, Handler, Stetten and Smith.

"My own scientific interests have entwined with those of Dr. Stetten. His work on intermediary metabolism especially related to glucose metabolism closely overlaps with my areas of interest in diabetes. Likewise, both Hans and Marney Stetten worked on comparative studies which overlap with our own interest in evolutionary origins of some hormone-like regulatory systems.

"When Dr. Stetten was the director of intramural research of the institute that is now NIDDK, he recruited Jim Field, who headed up the diabetes section. Dr. Stetten and Dr. Field actually collaborated on several diabetes-related works. As I progressed in my work at NIH, I became the successor to Dr. Field, once removed, as head of the diabetes section in NIDDK. In fact, the present day Diabetes

Branch is a successor to the group established by Dr. Stetten and Dr. Field.

"Dr. Stetten was responsible for bringing to NIH many of the people who have played an important role in my own growth and development at NIH and to the growth of the institute today. Dr. Ed Rall, recruited by Dr. Stetten to head up the Clinical Endocrinology Branch, recruited Jack Robbins. Rall and Robbins recruited me to NIH. Dr. Rall succeeded Dr. Stetten as scientific director of NIDDK. I in turn am Rall's successor.

"Some of the outstanding laboratories at NIH owe their existence in their current form to Dr. Stetten. For example, one of the longest lived and most extraordinarily productive laboratories at NIH is NIDDK's Laboratory of Molecular Biology. It was established by Dr. Stetten on advice of Dr. Gordon Tomkins in the 1950's. This group, which contains many outstanding scientists including Drs. Gary Felsenfeld, David Davies and Marty Gellert, owes its existence to the foresight of Drs. Stetten and Tomkins. The remarkable longevity, productivity and creativity of this group is now legendary.

"In summary, my own personal growth and development, that of my scientific interests and the scientific program in my institute all have strong imprints of Dr. Stetten's influence."



Stetten, currently NIH deputy director for science emeritus, accepted the good wishes of many admirers.

Dwyer Honored for Service As Rescue Squad Chief

David S. Dwyer, management analyst in DRG's Office of Administrative Management, recently received two special honors for his work with the Bethesda-Chevy Chase Rescue Squad, specifically celebrating his 20th year as chief.

First, from the Almanac Newspapers, he received the 1988 Community Service Award, which was given at the 24th Annual Awards Banquet, sponsored by the Montgomery County Press Association, on May 11. Dwyer was cited for being "the principal administrator to the rescue squad who toils to stretch the department's \$600,000-a-year budget," preserving the free service to the community.

Secondly, he was honored by his department at a testimonial held on Mar. 12, celebrating his 20th year as chief of the B-CC Rescue Squad. With 400 people in attendance, the reception was overseen by toastmaster Patrick J. Buchanan, the former White House aide and nationally syndicated columnist.

Twenty-four speakers presented gifts and awards, including representatives from his department, the local, state and federal governments, the business and medical communities, and fire and rescue service peers.

Career highlights mentioned included his selection, in 1981, as "Washingtonian of the Year," by *Washingtonian* magazine; his induction into both the county and state fire associations' halls of fame; his testimonies on Capitol Hill regarding local and national issues; and his continuing leadership in the fight to hold county fire and rescue service taxes down. His department is the only one left (out of 18) that still receives no direct tax support. □

Exhibit in Clinical Center Honors Stetten's 80th Birthday

A new exhibit, "DeWitt Stetten, Jr., M.D., Ph.D: Scientist, Administrator, Humanist," has been mounted in the Clinical Center lobby, Bldg. 10.

Erected in honor of Stetten's 80th birthday, the exhibit focuses on three of his major contributions to NIH and the biomedical and scientific communities.

Stetten, NIH deputy director for science emeritus since his retirement in 1986, came to NIH in 1954 as director of intramural research of the National Institute of Arthritis and Metabolic Diseases. He is most widely recognized for elucidating the physiology of gout, an achievement that led to his election to the National Academy of Sciences.

The new exhibit, which highlights Stetten's research and administrative positions, includes photographs, textbooks and reprints and was designed by Dr. Victoria Harden, curator of the DeWitt Stetten Jr. Museum of Medical Research. □



ed, 1) and his children and grandchildren, pose for a

PAY PROBLEM*(Continued from Page 1)*

corps membership) are not getting anywhere near the salaries they could command on the outside.

"Our studies show that, on the average, NIH SES physicians (of which there are 52) are paid 51 percent less than their academic counterparts," testified Wyngaarden. "Other NIH SES doctorates (of which there are 103) are paid 19 percent less. Virtually all of these individuals can command substantially higher salaries in the private or academic sectors, and many have standing employment offers.

"All have been experiencing severe limitations in their salaries over the last several years and the lack of a pay raise has affected their morale," he continued.

Though reference to pay problems can be found throughout NIH's modern history (indeed, in any workplace), formal attempts to address an alleged "brain drain" began in 1981. That was the year the Committee on Pay and Personnel Systems in Intramural Research (Eberhart Committee) was appointed.

Focusing solely on intramural scientists here, the committee offered two recommendations: keep the Commissioned Corps as one form of employment, and replace the Civil Service system with a new pay and personnel system called the "Scientific Faculty" for doctoral-level research scientists. The Scientific Faculty would offer salaries and incentives comparable to those offered by NIH's main competition in the marketplace—the university medical schools.

No sooner did the Eberhart Committee make its report than Wyngaarden asked Chen to head a new "NIH Committee on Pay of Scientists" (Chen Committee). The new committee was charged with extending the Eberhart Committee recommendations to extramural NIH as well as intramural.

Good ideas have a way of being appropriated, though, and soon enough, the DHHS assistant secretary for health decided the Chen Committee should expand the Scientific Faculty idea to include all of PHS, not just NIH. That meant FDA, CDC and ADAMHA joined the bandwagon.

At about the same time, and entirely by coincidence, a White House panel, dubbed the Packard Committee, examined pay problems in federal labs. It concluded not only that a new system to replace "the unduly rigid hiring, salary, and promotion rules of Civil Service" was necessary but also that NIH was the site of "the largest difference between the federal pay ceiling and the private-sector earning power of specialized academic physicians."

Chen's SF proposal addressed this pay gap in several ways. The first was to establish a university type rank-in-person personnel system with three tenured ranks and one non-tenured rank. The titles assistant scientist, scientist, senior scientist and principal scientist would correspond in the SF system with the academic equivalents—assistant professor, associate professor, professor and department chairman.

In addition, the SF would authorize an expanded salary range based on faculty salaries in U.S. medical schools, as reported annually in a survey by the Association of American Medical Colleges. These salaries would not be limited by pay caps applicable to the General Schedule (GS) or SES.

Chen estimated that such a system, if implemented in FY 1987, would have added only \$3.57 million to the NIH payroll, or less than 1 percent of the total NIH payroll. But the system was never adopted; it died at the DHHS level after having been submitted in June 1984.

The latest proposal before the department is one that borrows the two top ranks—professor and department chair, and their associated salaries—from Chen's SF and is called the Senior Biomedical Research Service.

SBRS, the fruit of the so-called Coogan Committee, was first drafted by Chen several years ago. Thomas McFee, head of DHHS personnel and a champion of better pay for federal scientists, added technical language and an SBRS bill was sent forward to the Office of Management and Budget (clearance point for all legislative proposals from executive agencies before they go to the Hill) by then DHHS Secretary Otis Bowen in October 1987.

OMB sent the draft to the Office of Personnel Management as well as other government agencies for comment. Constance Horner, then chief of OPM, opined that SBRS was too narrow. It should cover all government science laboratories, not just PHS, she argued. Based on OPM's advice, OMB never sent the first SBRS draft to Congress. Once again, an insufficient breadth of scope such as hampered the Eberhart Committee's first proposal sent NIH and department staff back to the drawing board.

Last year, Sens. Edward Kennedy and Orrin Hatch appended language for a Senior Biomedical Scientific Service, which would have raised salaries for senior scientists at NIH, to

*(Continued on Page 9)***Examples of NIH Recruitment and Retention Problems****Recruitment**

On at least six occasions since 1982, top candidates for four different institute director positions—after showing substantial interest—asked not to be considered further because NIH could not offer an adequate salary or equivalent benefits. All of these positions were filled from within.

During this same period of time, more than 20 prominent senior scientists expressed interest in positions for which NIH was recruiting. All declined further consideration because they were currently earning salaries ranging from 20 to 263 percent more than NIH could pay.

Retention

In the last 6 years, NIH also lost a deputy director and five institute directors due to salary considerations.

Over the last decade, NIH has not been able to recruit a single senior research scientist from the private or academic sectors to engage in the independent conduct of a clinical or basic biomedical research program.

During this same period, NIH has suffered a net loss of 28 percent of its most senior research scientists. All left NIH to accept positions in academic institutions, industry,

and independent research laboratories at salary increases ranging from 50 to 300 percent.

Within the last year, NIH has lost a half dozen prominent scientists, including:

- The individual responsible for setting up a national network of clinical trials for testing and introducing new treatments for cancer recently left to accept a highly lucrative position with Bristol Myers. This is the mechanism that made it possible to introduce AZT rapidly for widespread use in the treatment of AIDS.
- One of the country's foremost experts in breast cancer accepted a position to direct the Lombardi Cancer Research Center at Georgetown University at more than double his NIH salary. Five of his senior colleagues accompanied him to Georgetown, and all received substantial increases in salary.
- A leading neurological research scientist recently accepted a position at Mt. Sinai Medical Center at more than twice his NIH salary. He had made great strides towards understanding and possibly treating genetic demyelinating diseases, such as multiple sclerosis and Guillain-Barre disease.

(Continued from Page 8)

an NIH reauthorization bill. But the proposal was struck down in a last minute flurry of legislative action just before the presidential election last November.

"In essence, we didn't get anything," lamented Chen.

"Some senators objected to a bill addressing pay problems for PHS scientists but not those of, say, NASA," said Stephen Benowitz, head of NIH's Division of Personnel Management.

Today, a second draft of SBRS that links salaries to the marketplace (rather than an arbitrary pay cap) and allows bonuses for breakthroughs is making its way toward introduction in Congress. Chen expects that the new DHHS secretary Dr. Louis Sullivan, like his predecessor Bowen, will strongly support the legislation.

"I don't know what form his support will take, but he is certainly aware of the problem, having come from a medical school (Sullivan headed Morehouse Medical School in Atlanta)."

A new committee at the DHHS level has been reassembled, with Chen and John Mahoney, NIH associate director for administration, representing NIH. Early this month, the committee circulated a draft of its new SBRS bill for comment.

Chances for the new bill's success were not helped any, however, by the failure of congressional and federal executive pay raise legislation back in February.

"We're victims of that failure," said Chen. "It is unfortunate that legislation meant to affect others directly affected us."

Immediately following the scuttling of Congress' raise, NIH officials, including deputy director Dr. William Raub, appeared in the media warning of the consequences of limiting pay for federal executives. In response, several members of Congress, including Reps. Steny Hoyer (D-Md.) and Silvio Conte (R-Mass.), have come to NIH's aid.

"That's a breakthrough," said NIH's Benowitz. "My optimism has increased."

He is heartened also by Rep. Connie Morella's membership on the Post Office and Civil Service Committee before which Wyngaarden offered gloomy testimony on Apr. 27; Morella represents the Maryland district that includes NIH and is a friend of the institutes.

"The right people in the House are aware of our problem now," Benowitz said, "and hopefully they will support legislation."

"Whatever we end up getting will depend on the legislative package," said Chen. "Any improved salary will help us, even if it is only 20 percent." □

NEI Establishes International Office

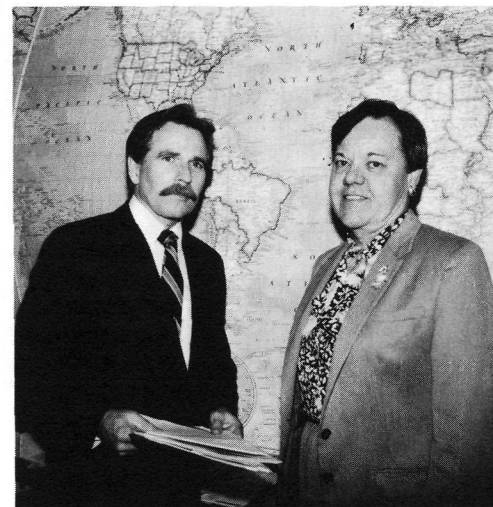
An Office of International Program Activities has been created within the Office of the Director, NEI.

The establishment of this office consolidates NEI staff members whose duties have been primarily in the international arena.

Dr. Barbara A. Underwood, who was special assistant to the director for nutrition research and international programs, has been reassigned to be assistant director for international program activities. Terrence Gillen, who was chief of the policy, legislation, planning and evaluation section, has been reassigned as deputy assistant director for international program activities. He will also be the institute's international programs liaison officer.

Underwood is an internationally recognized expert on nutrition who has 27 years of experience working on research projects in developing countries with numerous international organizations and agencies of the U.S. government. She received a B.A. from the University of California, Santa Barbara, an M.S. from Cornell University, and a Ph.D. in nutritional biochemistry from Columbia University. After completing her doctorate, she was stationed in Pakistan for 4 years, first as a research associate and then as an assistant professor, working for the University of Maryland School of Medicine. While in Lahore she was director of the division of nutrition at the International Center for Medical Research and Training.

She has also been an assistant professor of nutrition at Columbia University and an associate professor of nutrition and director of the division of biological health at the College of Human Development, Pennsylvania State University. At the Massachusetts Institute of Technology she was associate professor of nutrition and resident coordinator of the inter-



Terrence Gillen and Dr. Barbara A. Underwood

national food and nutrition policy program. For the past 2 years she has lectured in the department of international health at the Johns Hopkins University School of Hygiene and Public Health. Underwood has been with NEI since 1982.

Gillen graduated from Georgetown University and holds master's degrees in both business administration and English. After teaching for 2 years in the Philippines with the Peace Corps, he served in the Army in the adjutant general's office at the Pentagon, where he was awarded the Army Commendation Medal. After a year as a Department of Commerce management intern, he was a supervisory budget analyst with the National Oceanic and Atmospheric Administration. Gillen's outside activities include freelance writing and editing. During the past 2 years he has edited two books on the prevention of blindness and has plans for a third. □

Navy Opens Bowling Center, Officers Club

The National Naval Medical Center, across the street from NIH's main campus, has opened its bowling center to NIH employees. The NNMCM Bowling Center has 20 lanes, a pro shop, game room and a full service snack bar. Your R&W card or NIH ID card entitles you and three guests to use the facility. Call 295-2034 for open lane times and prices.

In addition, the Bethesda Naval Commissioned Officers Club is opening its membership to NIH'ers (GS-9 or above). Call 652-6318 for further information. □

R&W Offers Canoe & Steak Day

Join us for a day of canoeing, swimming and beautiful scenery on the Shenandoah River, followed by an all-you-can-eat steak dinner cooked over open fires, June 24.

Cost for the day is \$32 (\$7 for children under 8) and includes canoe/equipment rental and steak dinner. Participants will meet at the outfitters at 9:30 a.m.—maps and instructions will be provided upon sign-up. Free primitive camping is available ¼ mile from the outfitters for those who wish to drive up Friday evening or stay over Saturday night.

Sign up for this day of fun at the R&W Activities Desk in Bldg. 31, 496-4600, no later than June 16. □

Dr. Sanford M. Rosenthal Dies; Was Arthritis Institute Official

Dr. Sanford Morris Rosenthal, 91, a retired chief of the laboratory of pharmacology and toxicology at the National Institute of Arthritis and Metabolic Diseases, died of cardiac arrest May 1 at his home in Potomac.

Rosenthal joined the Public Health Service in 1928 and held the rank of medical director. He was chief of the laboratory of pharmacology and toxicology for 13 years before retiring in 1961.

During his career, Rosenthal contributed important information in several widely different fields including the pharmacology of compounds containing arsenic, sulfonamide drugs, liver function tests, therapy of shock, antidote for mercury poisoning and the biochemistry and physiology of amines.

He developed a liver function test in 1931, an antidote for mercury poisoning in 1934, and a treatment for pneumococcal pneumonia in 1937.

During the early 1950's, he found that a saline solution taken orally was as effective in treating the shock resulting from severe burns as the traditional treatment of intravenous injections of whole blood or plasma.

After retiring, Rosenthal remained with the

NIAMD for several years as a consultant.

A native of Albany, Ga., Rosenthal graduated from Vanderbilt University, where he received his degree in medicine in 1922. He was a lecturer in pharmacology at McGill University in Montreal before joining the PHS in Washington in 1928 as a senior pharmacologist.

Rosenthal, who had published more than 100 scientific papers, was elected to the American Academy of Sciences in 1979. He was a member of the American Society of Pharmacology and the Washington Academy of Sciences.

He had received the American Burn Association's Harvey Allen Award for distinguished service and the PHS Meritorious Service Award. He also received an award from the American Society for Pharmacology and Experimental Therapeutics for his outstanding accomplishments.

His wife, Lillian Rosenthal, died in 1983. Survivors include a son, Stephen Rosenthal of New York City; two daughters, Elizabeth Barbehenn of Bethesda and JoAnn Post of Monroe, N.H., and four grandchildren.

Loftis, Formerly of NINDS, Dies

Adrian P. Loftis, 80, a retired laboratory animal technician for the National Institute of Neurological Disorders and Stroke, died Mar. 10 of cancer in his Washington, D.C., home.

Loftis, a Dunbar High School graduate who also attended Howard University and studied animal husbandry at the University of Maryland, served the National Institutes of Health from 1956 until his retirement in 1988. He became responsible for the care and handling of laboratory animals, and he invented a tool for safely handling cats. He also taught classes on the training and care of animals.

A longtime NINDS coworker described Loftis as "very ambitious. He was always trying to learn something new," says Willie Perkins. "And the more he learned, the more he tried to learn."

Loftis was a member of the American Association for Laboratory Animal Science and MENSA, a national organization for people of high intelligence. He also played the saxophone and wrote music.

Loftis was a former secretary with the Greater Washington and Maryland Youth Center Inc., and had been a volunteer with CARE.

Among Loftis's survivors are his wife of 59 years, Synora Loftis, and a son, Rial Loftis, both of Washington.

Dr. Edward P. Offutt Jr., Mourned

Dr. Edward P. Offutt Jr., 75, retired science administrator at the arthritis institute (NIAMD), died of cancer on Apr. 20.

Born July 7, 1913, in Arlington, Mass., he was the only son of the late Edward P. and Laura Berry Offutt.

Offutt graduated from Dartmouth College in 1935 and received his Ph.D. from Rice University in 1939. Since his retirement he had devoted his time to the Montgomery County Historical Society, where he was a member of the board of directors and a trustee.

Surviving are his wife, Virginia Williams Offutt; three daughters, Claire O. Leonard of Salt Lake City, Utah, Evelyn O. Purdum of Mount Airy, Joanne O. Hoyle of West Friendship; two sisters and eight grandchildren.

In lieu of flowers, contributions may be made to the Montgomery County Historical Society, 103 W. Montgomery Ave., Rockville, MD 20850.

Orientation to Extramural NIH

The Office of Health Scientist Administrator Development Programs will be presenting an orientation session entitled "Fundamentals of NIH Extramural Activities," on July 27-28. This full 2-day course will be held in Bldg. 1, Wilson Hall, starting at 8:30 a.m., with registration at 8 a.m. each day. The course will provide an overview of extramural activities. Individual sessions will cover grants, primarily, but will include contracts and cooperative agreements, the review processes and the scientific and fiscal management of awards, and the criteria for the selection of the appropriate award mechanism.

The number of participants will be limited to approximately 50 people. Priority will be given to those who are new (6-9 mos.) to the extramural side of NIH at all grade levels.

Those interested are to submit an HHS-350 form (Training, Nomination and Authorization) through their appropriate BID channels to the HSA Development Programs Office (Bldg. 31, Rm. 5B-32). PHS Commissioned Officers are asked to use this form also. In item 10, please list your complete office address, not your home address; item 14—no cost; item 18 send vendor's copy to the HSA Development Programs Office, Bldg. 31, Rm. 5B-32; item 20 A(8), B(8), C(1), D(NA); please be very specific in items 16 and 17 and indicate how long you have been in the NIH extramural area; item 21 (NA) and item 22 (9998). All other instructions are on the back of the HHS-350.

To be considered, applications must be received in the HSADP office no later than COB June 27. Merely submitting an application to personnel, no matter how early, does not assure its reaching the HSADP office by the deadline date or at all. It is the applicant's responsibility to see that the HSADP office receives your application by the deadline date. Applications received after the deadline will be returned without further consideration. Each applicant will be informed of the decision concerning his/her application. Those selected will be provided with further details of the course. No one will be admitted to the course without the memo of selection signed by the codirectors.

Any questions about this course may be directed to A. Robert Polcari or Roberta Light, 496-1736, or Dr. Paul Velletri, 496-7707. □

Pregnant Vols Needed

For a study of pregnancy and the postpartum period, interested volunteers who are in their first pregnancy (between 16 and 18 weeks) can call Dr. Douglas S. Rabin, 654-2964, between 9 a.m. and 5 p.m. and leave name and telephone number. Participants will be reimbursed. □



TRAINING TIPS

The NIH Training Center of the Division of Personnel Management offers the following:

Courses and Programs Dates

Management and Supervisory 496-6371

Attitudes: How They Affect Productivity	7/11
Creative Basics for Changing Workplaces	7/12
Working With Personal Differences: MBTI	
Applications for Professional Development	7/19

Office Operations Training 496-6211

Introduction to Working at NIH for New Support Staff	6/19
Basic Time and Attendance	7/6
Reducing Stress: Rebuilding Energy	7/12
Delegated Acquisition	7/24

Training and Development Services 496-6211

Personal Computer training is available through User Resource Center (URC) self study courses. There is no cost to NIH employees for these hands-on sessions.

The URC hours are:

Monday-Thursday	8:30 a.m.-7:00 p.m.
Friday	8:30 a.m.-4:30 p.m.
Saturday	9:00 a.m.-1:00 p.m.

NOW AVAILABLE ON SHARE TRAINING
FY 89 Training Center courses.

Access Wylbur and enter SHARE
TRAINING. First time users only, enter:
x fr &ags2ugL.@@share(setup) on file37

Coping With Grief and Loss

Any major loss may involve grief. Intense grief is a normal reaction to the death of someone you loved. The end of a marriage can lead to feelings such as depression, anxiety, isolation and hopelessness. Understanding this grief process and knowing that your feelings and experiences are normal can help. There are many supports and strategies to help you cope with grief and loss.

The Employee Counseling Services at NIH is available to all employees who are suffering from the emotional pain associated with grief and loss. Counselors will meet with you to assess your situation, and explore the best options available to you to obtain support during this time. Counselors can refer you to self-help support groups or mental health professionals who specialize in the area of grief and loss. Whatever your situation may be, please do not hesitate to call Carol Weiss, L.C.S.W. or Michael Bowler, Ph.D. for a free confidential assessment. The Employee Counseling Services is located in Bldg. 31, Rm. B2B57. Counselors can be reached at 496-3164 weekdays between 8 a.m. and 5 p.m. □

Dr. Morrison Rogosa Dies; NIDR Scientist Emeritus

Dr. Morrison Rogosa, 80, scientist emeritus in the microbial systematics section, Epidemiology and Oral Disease Prevention Program, NIDR, died Mar. 28 of congestive heart failure.

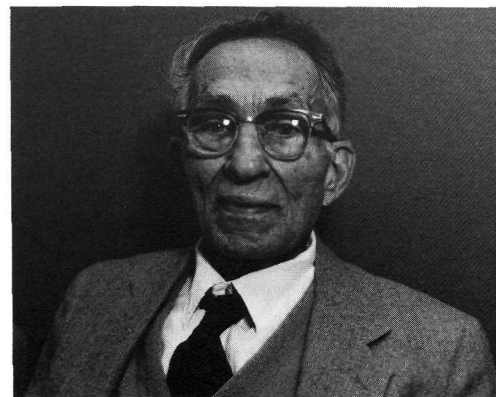
Rogosa's research career spanned more than five decades. He was a specialist in the isolation, classification and study of oral bacteria.

He received his B.A. from the University of Iowa in 1930 and his M.S. from Massachusetts State College in 1934. From 1936 to 1948, Rogosa worked for the U.S. Department of Agriculture's Bureau of Dairy Industry Research Laboratory in Washington, D.C. During that time he also attended the USDA Graduate School. In 1948, he attended the University of Maryland. That same year, he joined NIDR in its first year of existence.

From 1949 through 1953 he organized and maintained NIDR's field laboratory at the Eastman Dental Dispensary (now Eastman Dental Center) in Rochester, N.Y., where he studied bacterial flora in hamsters in relation to dental caries. He also conducted a clinical study relating bacterial flora of children to the development of dental caries. He returned to Bethesda in 1953 as a research microbiologist in the Laboratory of Microbiology and Immunology (LMI) where he worked until 1958.

Rogosa served as visiting research professor at the University of Reading, England, from 1958 to 1960.

He continued his work at NIDR as a Research Microbiologist at LMI until his retirement in 1974. During the next 3 years Rogosa served as a consultant to the



Dr. Morrison Rogosa

American Type Culture Collection. In 1975, he was named scientist emeritus at NIDR and in 1978 he was awarded an honorary doctorate by the University of Tucuman, Argentina.

In recognition of his contributions to bacterial taxonomy in general, and specifically to the eighth edition of *Bergey's Manual of Determinative Bacteriology*, he was given the Bergey Award in 1981. Rogosa coauthored the 1986 book, *Coding Microbiological Data for Computers*.

He is survived by his wife Sylvia Rogosa; his children Dr. Victor Rogosa and Dr. Vivian Pollak; a brother, George Rogosa; two sisters, Lena Vogel and Rebecca Rogosa, and grandchildren Edward and Steven Pollak.

A memorial service was held at Danzansky-Goldberg Memorial Chapel in Rockville, Md., on Mar. 31. Expressions of sympathy are being made to the Patient Emergency Fund at NIH.

Fogarty International Center Advisors Named

Three new members have been appointed to the advisory board of the Fogarty International Center.

They are Drs. Baruch S. Blumberg of Fox Chase Cancer Center in Philadelphia, Joan Kreiss of Harborview Medical Center in Seattle, and Victor Rabinowitch of the National Research Council in Washington, D.C. The appointments are for terms through January 1993.

Blumberg, vice president for population oncology of the Institute for Cancer Research at Fox Chase, has wide experience in international health problems in medicine, laboratory science, epidemiology and history. His original research on worldwide inherited blood variants led to the discovery of the hepatitis B virus and the development of vaccines against hepatitis. He was awarded the Nobel Prize in

Physiology or Medicine in 1976.

Kreiss heads an important program in AIDS epidemiology that focuses on international aspects of AIDS and is conducting AIDS research in African countries. She will also provide expertise stemming from her extensive international experience with studies of virus transmission and her prior consultantships to the World Health Organization and the U.S. Agency for International Development.

At the National Research Council, Rabinowitch is executive director of the Office of International Affairs, where he is responsible for international programs and studies of international science and technology policy. His scientific background in ecology, zoology, and international relations provides extensive perspective on the impact of science on the world's societies. □

*Scientist, Administrator, Teacher***Becker Receives Bicentennial Medal from Georgetown University**

By Anne Barber

From laboratory to administration, and back again to the laboratory, Dr. Edwin D. Becker has made the full circle while teaching continuously during the time. "It is for accomplishments in all of these activities that he has earned the Bicentennial Medal from Georgetown University on its 200th anniversary," says Dr. Joseph E. Earley, professor and chairman, department of chemistry, at Georgetown.

The medal was presented to Becker on May 4 in "grateful recognition of his long and fruitful dedication to Georgetown University, to the welfare of the nation, and to the progress of science."

After the presentation, Becker gave a lecture on "Nuclear Magnetic Resonance: From a Physical Phenomenon to a Chemical and Bio-medical Technique."

Becker has been an adjunct professor at GU for 30 years and, says Earley, "has made outstanding contributions, both in science and in administration, through his work at the National Institutes of Health. He has also been responsible for developing cooperative relationships within the scientific community in the Washington, D.C., area."

Becker teaches a course on molecular spectroscopy at Georgetown. "It is stimulating and fun to teach a group of graduate students in an area in which I have worked and am continuing to work," he says.

Georgetown is not the only place he teaches. Becker also teaches a nuclear magnetic resonance (NMR) course at NIH for the Foundation for Advanced Education in the Sciences (FAES) and has done so for approximately the same amount of time he has been at Georgetown—30 years.

Becker joined NIH in 1955 in the then National Institute of Arthritis and Metabolic Diseases. He was chief of the Laboratory of Chemical Physics, NIDDK, when Dr. Donald Fredrickson (NIH director at that time) enlisted him to become acting director of the Fogarty International Center (1979) for 1 year, and later NIH associate director for research services (1980–1988).

"I remained chief of the NMR section, even when I went to Bldg. 1," he says. "I started out in Bldg. 2 and now I am back in the same building with the same section."

"I feel that I accomplished a lot of things while I was in Bldg. 1, but I never left the lab behind," said Becker. "I kept up with advances taking place with NMR and tried to keep active in the laboratory itself."



Dr. Edwin Becker holds the Bicentennial Medal he received recently from Georgetown University honoring its 200th birthday.

While still in Bldg. 1, Becker was instrumental in the planning and construction of the new In Vivo NMR Center that opened during the summer of 1987. He now serves as chairman of the steering committee for the NMR center.

The center serves as a facility in which investigators from all BIDs can carry out research in the application of NMR to living systems. "This is a very rapidly developing area," continues Becker, "since noninvasive NMR imaging and spectroscopy studies provide valuable information on anatomical structure and metabolic processes."

"In addition to sharing the expensive facilities (more than \$6 million for the initial instruments and building), cooperative work among the scientists there is leading to better and more sensitive methods for studying humans and experimental animals."

An author of more than 90 papers, Becker has written two books on NMR. The first, *High Resolution Nuclear Magnetic Resonance*, was published in 1969, with a revised edition in 1980. Another book, *Pulse and Fourier Transform NMR*, written in 1971 with Dr. Thomas C. Farrar (then of the National Bureau of Standards) is still in use. "I think this book is one of the most widely used in the NMR field," Becker states. "It provides a simple, straightforward, easy way to understand the fundamentals of Fourier transform NMR."

"Since 1980, I've had no time to write, but now I am excited about collaborating on a

new book with Dr. Ad Bax of the Laboratory of Chemical Physics," he says. "The book will discuss the latest techniques and advances of the new two-dimensional NMR being used today."

Becker has just returned from India, where he serves as collaborator on several projects that have been developed since 1972. "It has really been interesting to see India move forward in science development, particularly in terms of instruments and facilities, where there have been tremendous advances."

In New Delhi, plans are under way for a new NMR center similar to the In Vivo NMR Center at NIH. "It is to be located at the All India Institute of Medical Sciences, a modern research institute with a large research and general purpose hospital," he said.

Writing, publishing, teaching, collaborating with other countries and serving on various boards and committees, Becker is delighted to be back at work in his section and is looking forward to spending more time in the laboratory. □



Drs. James Joseph (l) and George Roth of the molecular physiology and genetics section of NIA's Gerontology Research Center will receive the 1989 Sandoz Prize for Gerontological Research from the International Association of Gerontology. The award will be presented at the International Congress of Gerontology in Acapulco in June. The work being cited concerns the role of calcium mobilization in altered signal transduction in the nervous system. Calcium has been shown to be important for communication between nerve cells in the brain.